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AUTHOR Fontes, Norm; And Others
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ABSTRACT

This study explores the effect that divorce has upon interpersonal influence in family communication directed at children. A paradigm utilizing Woefel's Forced Aggregate theory was developed for exploration of the problem area. A number of practical and theoretical implications are presented. The research is intended to have far-reaching theoretical benefit for the social sciences in general in terms of information theory and network analysis. Its social significance lies in its applicability to a very severe problem area in society, namely a method by which courts can review their initial custodial decisions at a later point in time to determine whether the original decision should be modified because of changes in the family system. The possibility exists that this research may shed light on the causes of juvenile delinquency in such areas as illegal drug usage and vandalism. (EE)

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An Application of Force Aggregate Theory in Family Communication Networks

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by

Norm Fontes, Michael Roloff, John Hocking and Richard Bechtel

Michigan State University
East Lansing, Michigan

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Sociologists, psychologists and interpersonal communication experts testify to the importance of significant other influence in determining behavior (Katz and Lazarsfeld, 1955; Haller and Butterworth, 1960; Sewell and Shah, 1968). The effect of family communication on human behavior is equally well documented. According to Davies:

> The family is the most prominent environmental source not only of what may be deemed its inherent function of providing affection but also of satisfying other needs. This is probably the central reason that the individual comes to think and act like his family more than he thinks and acts like those who are less regularly relevant to his need satisfactions. In the process of fulfilling his needs, the individual established who he is and whom he is like. In short, he thus establishes his identity. (Davies, 1965)

Perhaps no single event has had as dramatic an effect upon interpersonal influence in family communication as the rising divorce rate. This effect is particularly serious when the family includes children and when one or more of the parents remarries. In the situation in which remarriage involving children occurs, the effect of the family on behavior is altered. The child is suddenly faced with multiple networks providing him with information. Such information may be discrepant and have a deleterious effect upon children's psychological and sociological development.

It will be the purpose of this study to examine the differential effect of a child's participation in the two-family systems on his socialization

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and psychological development. Such a task divides itself into three parts: (1) an exploration of the problem which gave rise to this study; (2) an examination of a theoretical paradigm for exploring this problem: and (3) drawing some conclusions regarding the effect of our inquiry on the problem area and communication theory.

Statement of the Problem Area

The following three issues prompted our inquiry: (1) One of the principal functions of a family is to provide for the social development and psychological stability of children. (2) One of the principal threats to the social and psychological stability of children is divorce and remarriage which places the child in a two-family system. (3) A systematic examination of interpersonal networks in the two-family system would prove beneficial in locating a solution to the problem as well as in forming communication theory.

One of the principal tasks of the family is to provide socialization for children during their early stages of development. Cartwright and Zander (1968) suggest that a child's early normative structure, his "acceptable beliefs," are primarily a product of a child's training and interaction within the family system. Woelfel and Haller (1971) indicate that as late as the eighteenth year, paternal influences on offsprings' decision-making is still one of the most powerful variables for predicting educational and occupational choice.

One of the significant threats to the stability of the family system and thus a major factor impairing socialization of children is divorce. By early 1960, the possibility of disrupting the family system through divorce

had reached one out of four marriages (Blood, 1969) impairing the socialization of approximately 460,000 children (Kushner, 1965). In cases where a family system is disrupted by divorce, two criteria are used by the courts in awarding custody of the children: (1) sex of the offspring (Bernard, 1956) and (2) fault in the divorce (Bernard, 1956). It is interesting to note that no single study or set of studies have been undertaken to assist the courts in determining the personality types or social situations which contribute to the effect of social development and stability of the child.

The situation becomes even more complex if the custodial parent remarries. Remarriage occurs for three-fourths of all divorced men and two-thirds of all divorced women (Blood, 1969). With the introduction of the stepparent into the family communication network the child is faced with two separate family systems attempting to influence him. While no one has attempted to systematically explore the effects of this dual systems influence on the child's socialization and stability, several studies indicate a potentially dangerous situation may be created by participation in two separate family systems. Rosenberg (1965) found that children of remarried mothers had lower self-esteem and more psychosomatic symptoms than children whose divorced mothers never remarried, while Nye (1957) found that children felt closer to a mother without a partner than to one with a new partner. Bernard (1956) indicates that tension between family systems may become particularly intense under certain conditions.

> Divorce by no means invariably makes the participants emotionally free of each other, especially if it was sought in the first place for neurotic reasons--for revenge, for example, or retaliation--for these neurotic passions may not be assuaged by the divorce.

> They may continue to operate long after the marriage has been legally disolved, hurting the child more than the parents because so long as he is being used by one parent as a weapon against the other, he is not being loved for himself.

Messages sent to the child in this situation present the child with conflicting definitions of who he is and how he should act and place him in a double bind. Watzlawick, Beavin and Jackson (1967) describe the characteristics of such a situation:

> (1) Two or more persons are involved in an intense relationship that has a high degree of physical and/or psychological value for one, several or all of them. (2) In such a context, a message is given which is so structured that (a) it asserts something about its own assertion and (b) these two assertions are mutually exclusive. Thus, if the message is an injunction it must be disobeyed to be obeyed; if it is a definition of self or the other, the person thereby defined is this kind of person only if he is not, and is not if he is. (3) Finally, the recipient of the message is prevented from stepping outside of the frame set by this message, either by metacommunicating (commenting) about it or by withdrawing.

The child cannot physically withdraw from the situation. If he behaves as the stepparent advocates he has violated the beliefs or expectations enumerated by the absent parent and vise versa. He may find himself punished by whichever parent he disobeys. This bind may have serious effects on the child's psychological states leading to stress and impairment of social and psychological stability.

A study that investigates systematically the differential effects of two-family systems upon the social development and stability of a child appears in order for two reasons: (1) it would provide valuable information for judges in awarding custody of children and (2) it would contribute to the development of network theory in the area of interpersonal communication.

Theoretical Paradigm

Our discussion of a theoretical paradigm suitable for investigating the effects of divergent information upon an individual's behavior will be divided into four sections. First, a brief review of extant theories that have attempted to deal with this problem will be presented. Second, a discussion of Woelfel and Haller's Linear Force Aggregate Theory and how it can be applied to this problem will be presented. Third, a number of specific hypotheses deduced from the Linear Force Aggregate Theory will be presented and briefly discussed. Finally, a research design for executing the study will be presented.

Social scientists have long known that attitudes and behavior are at least partially a function of the expectations individuals perceive others to hold for them. Theorists, however, do not agree on what outcomes result when an individual is exposed to many other people, each of whom holds differing or contradictory expectations. A wide variety of theoretic perspectives have been generated to account for behavior in these situations.

While these formulations differ in many respects, all assume a behavioral choice model in which a person must select one behavior from a variety of possibilities. The individual must in these situations respond differentially to the disparate expectations they perceive others to hold for them.

> Although these theories differ in particulars, all share the tacit assumption that the individual chooses to respond differentially to the different expectations; i.e., he accepts some and rejects others. The essential differences among these theories revolve around the criterion on the basis of which such selectivity is thought to occur. (Woelfel and Saltiel, 1973)

Considerable research energy has been expended by researchers attempting to account for response variance to differing expectations. Many have predicted and found statistically significant relationships. However substantial proportions of the response variance remain unpredicted and unacccunted for.

Recently, Woelfel and Haller (1971) have posited a theory that is quite applicable to the problem that we have posed. Essentially, Woelfel and Haller suggest that attitudes are informational structures that represent an individual's conception of relations to objects. Subsequently, attitudes are formed and changed by incoming information about the relationship of the individual to a given object. Such information may be expressed in either significant other influence or self-reflexive activity. The fundamental notion expressed in the Linear Force Aggregate Theory is that an individual does not selectively perceive incoming information, i.e., react only to certain information on the basis of some attitude or criteria. In contrast, they argue that an individual reacts to all incoming information and form or change their attitudes on the basis of all received information. In statistical terms, the theory argues that an individual's attitude converges on the mean of all expectations received by him.

This theory has been used by Woelfel and Haller (1971) to successfully predict educational and occupational aspirations. Using this theory, McPhail (1971) explained over 77% of the variance in the rate of attendance in French Separatist rallies. Woelfel and Hernandez (1972b) were able to explain more than 80% of the variance in marijuana smoking among a random

sample of American and Canadian university students.

The situation involving a remarriage with children provides an instance in which the Woelfel-Haller theory might be applied and tested. If the child receives conflicting information from the significant others we might assume that his attitude will equal the mean of all expectations to which he is exposed. Further, we may find that the wider the discrepancies between information, the higher the stress felt by the child.

The impact of information after remarriage could create significant problems for the child. The child (or children) involved in such a situation is very likely to be subjected to disparate expectations for any given behavior. He will be influenced from three different networks of significant others: (1) a peer network composed of friends, (2) a family network consisting of the custodial parent and a stepparent and (3) another family network consisting of an absent parent and a stepparent. We would not anticipate any problems if all three networks provided information concerning any given behavior that was homogeneous. However, it would seem to be an extremely precarious situation for the child's social and psychological development if the child were constantly subjected to disparate information inputs that advocated different forms of behavior. This would seem extremely likely to happen in situations in which some severe problem within the marriage has caused it to dissolve. Indeed, Terman and Buttenwieser found very low correlations and in a few cases, negative correlations between divorced partners on a vocational interest block. Items such as teetotalers showed a correlation of -.17 between partners. Such discrepancies may manifest themselves in information sent to the child. Remarriages would

further compound the situation by introducing a new value system into the child's environment which may increase the rate of disparate informational inputs.

The application of the Linear Force Aggregate Theory to the three networks from which the child obtains information will allow us to determine what effects they are having upon his stability and to predict what his behavior will be.

Hypotheses

Before going directly into the hypotheses, it would be worthwhile to review the kinds of relationships that we want to deal with. We argue that the psychological and sociological growth of children is dependent upon the validity and amount of information they receive from their significant others. In this case, three networks provide information to the child: the custodial parent - stepparent network, the absent parent - stepparent network and the peer network. No problems would be anticipated if the child's significant others supplied him with a sufficient amount of homogeneous information concerning any behavior. If however, the networks failed to supply the child with a sufficient amount of information or it was disparate, the child would be faced with a situation in which he could not act. From this situation, we propose the following hypotheses:

1. For any given behavior, as the amount of information required from the networks by ego decreases, the amount of stress experienced by ego will increase.

In this hypothesis, we argue that ego will require some amount of information to be received from significant others about a given topic before

he can act. This amount will vary from task to task. But if the amount of information from the significant others should dip below the required level to be sufficient for ego to act, then ego will undergo stress.

2. The greater the disparity of the aggregate value of network expectations of ego and ego's expectations of himself, the greater the amount of stress experienced by ego.

In this hypothesis, we argue that the total expectations that the significant others have of ego may be discrepant to the expectation ego has of himself. The significant others may underrate or overrate ego's capabilities when compared with what ego thinks he can do. The larger the discrepancy between the total amount of expectations from the networks for ego and ego's expectations for himself, the greater the amount of stress ego will undergo.

3. The greater the disparity of expectations of ego between the individual networks, the greater the amount of stress experienced by ego.

In this hypothesis, we argue that if there is a great disparity between what the individual networks expect ego to do about a given topic, then ego will feel a great amount of stress. Indeed, as the amount of disparity increases, the amount of stress experienced by ego will increase. Thus, if the custodial parent - stepparent network expects ego to do something vastly different from what the absent parent - stepparent and peer networks expect ego to do, then ego will experience a great amount of stress.

4. A decrease in the informational output or a blockage of a network resulting in no informational output for ego will result in an increase in communication between ego and the remaining two networks.

We argue in this hypothesis that if one network is blocked or for some reason unable to sustain a level of information, then ego will increase communication between himself and the remaining two networks. For example, if the custodial parent - stepparent network blocks the absent parent - stepparent network rrom communicating with ego, then ego will be forced to increase communication with the custodial parent - stepparent network and/or the peer network, in order to meet the desired amount of information for him to act.

Research Design

The theory outlined above defines the following variables as essential to the process under study: (1) The family and peer communication networks within which the individual is imbedded, and more specifically, the extent, composition and diversity of such networks; (2) the information content which passes through such networks -- particularly the variance in such networks; and (3) the psychological state of the individual contingent on these variables -- particularly the state of psychological stress which he experiences and the stability over time of his attitudes. Diagramatically, these variables are presumed to be related, as in Figure One:

Marital Status of Parents	Diversity of Communication Network	Variance in Expectations (information) Received by Ego	Psychological Stress	Attitude Stability

FIGURE ONE

Following from this outline, research procedures are straightforward. Since the rate of divorce in the U.S. is relatively high and, more importantly, disproportionately high in urbanized areas, careful selection of sample sites will make it possible to obtain a suitably large number of children of divorced parents in a general population of high school students. Consequently, we propose to base the research on a total of approximately 500 school children from several elementary and high school classes located in high divorce areas (tentatively in California and New York, although actual sampling procedures are not yet firm). Measurement of network characteristics can easily be done with appropriate forms of the Wisconsin Significant Other Battery (Haller & Woelfel, 1969, 1971). These instruments, whose validity and reliability have been carefully documented (Haller & Woelfel, 1969, 1972) identify by name, the exact persons with whom the individual principally communicates about educational and occupational topics. (Minor modifications can make the instruments suitable for other topic areas as well). The WISOB also contains valid and reliable rapid administration instruments which may be administered (a) to the individual, to measure his attitudes toward education and occupation, and (b) to the "significant others" directly, to measure the content of the information about education and occupation transmitted by each other to the individual. The statistical variance around the average of all such information received by the individual constitutes an accurate estimate of the diversity of information to which the individual is exposed in vivo. Psychological stress can be measured by an instrument devised by Langer and Srole (1962) modified to increase its relibility. Essentially, the modified instrument enumerates

22 symptons of stress (e.g., "I am nervous much of the time"), each of which is followed by a Likert-type scale measuring the extent of occurrance of such a symptom. Stability of attitude may be measured as the absolute of change in the individual's attitude over a six-month interval.

Basically then, the design calls for four stages of measurement: (1) Administration of a WISOB and stress measures (along with other basic instrumentations) to samples of selected elementary and high school students. (2) Administration of appropriate WISOB instruments to the significant others" identified in (1) above. And (3) readministration of (1) and (2) after a six-month interval.

These data readily lend themselves to a path-analytic mode of data analysis, and such is proposed as the basic technique to be used.

Implications

What information might this inquiry provide for those who must deal with the problems of children imbedded in two-family systems and communication theory itself?

Divorce not only results in problems for all family members concerned, but it places an awesome task upon our judicial system. It is an awesome task because judges are forced to rely primarily upon their learned judgment in deciding who will be granted custody of the child. He does not have the benefit of having had prolonged contact with either the plaintiff or the defendent or the children. Judges are forced to make a decision based upon the evidence that is available at the time of the procedings.

As was mentioned earlier, the family situation can change drastically if either parent remarries. This could have a tremendous effect upon the child, especially in situations where the custodial parent remarries, introducing another adult with a new value system into the child's home environment. Given the tremendous caseloads that our courts are faced with today, it is very difficult for them to re-examine the custodial decisions they make, especially when changes occur in the family. Currently, courts normally reconsider their custodial decisions if: (a) one of the parents involved requests a reconsideration; and (b) in cases involving extreme neglect. The majority of statutes concerning parental neglect "are limited in their scope to situations in which the child's care does not meet community standards as to what constitutes an adequate supply of food, clothing, shelter, education, or medical care". (Coyne, 1969, p. 43). Problems in the area of what could be called "emotional neglect" may be just as serious and yet are ignored by the courts. Additionally, there is a lack of instrumentation to gather the information for the courts. Currently, there is no systematic method of gaining the information needed by the courts. The problem does not emanate from the courts, but results from an inadequate amount of Social Science research in the area and an inability to provide the tools which will give the needed information (Woelfel-Haller, 1971, p. 75). Indeed, it would seem that unless some research provides the method of gathering such information, even a restructuring of court time would be inadequate to solve the problem.

What is being proposed here is the testing of a method that would hold great promise of fulfilling this need. The method could be executed

by social worker personnel who would administer the instruments involved and interpret the data. They would then submit a report to the appropriate magistrate concerning the case in question. He could quickly review the information provided him and determine whether or not the original decision concerning the child's custody should be altered. Because of the completeness of information that would be provided by the method being offered here, the magistrate would know exactly where the problem emanated from and if he wanted to just correct the problem, he could advise the parents of what their behavior was doing to the child and how to correct it. Given his learned judgment, if he thought the magnitude of the problem was such that it was beyond reparation, he would have sound evidence for removing the child from the home and awarding him either to the other parent or placing him in a foster home.

One of the many positive attributes of the method that would be developed is that it would not require personnel utilizing it to be statistically sophisticated. It would require a number of short interviews with the children involved, the custodial-stepparent network, the absent parent - stepparent network and the peers of the children in question. The interviews would be short and the amount of time that would be required of the personnel conducting the interviews and analyzing the result would not be expensive.

This method would also save the courts' time. Instead of listening to extensive allegations being lodged by either parent in court and attempting to make some decision based upon this, the court would have empirical evidence isolating the problem before the case ever comes before the court

formally, as to what is in fact the problem. He would also have at his disposal an empirical measurement of the amount of stress the child is under. Stress in a child's life can be an impediment to his social and psychological development.

The measurements would be direct measures of what is actually happening in the child's environment and the effects that it is having upon him. In the past, less direct measurements have been relied upon to determine how the child is adjusting to his new environment. One indicant that has been used is the child's progress in school. If he is doing poorly, it is assumed that his home life is not as wholesome as it should be. Another more direct method that has been used is the interviewing technique. Social workers (case workers) or the judge interview the child to try to assess the child's psychological state. While this has its advantages, it would seem that information obtained may not always be valid. The child may be fearful and reluctant to provide information because of some fear of the judge emanating from the surroundings in which the interview is being conducted. The child may be fearful and not tell the truth because he is afraid of the possible reprisals from one of the parents that exert influence upon him. The proposed method would provide a direct measure of the child's stress and of the role the parents play in creating this in his life. It would be less obtrusive than the present method in that the questions are not threatening in nature. Additionally, the relationships that exist between himself and all others as well as the kinds of information they provide him would be obtained.

Another indicant that has been used in determining the psychological stability and his development has been juvenile delinquency. It has been rightfully assumed that broken homes contribute or may in fact cause delinquent

behavior. The method would in fact determine how extensive this problem is. It is a very common occurrence for children from broken homes to engage in delinquent behavior. The problem might well be that the child is acting out as a result of stress that exists in his environment.

In addition to practical implications, this paradigm will contribute to further development of communication theory concerned with interpersonal networks in two ways. First, most forms of interpersonal interaction analysis do not view an individual as imbedded in a set of networks. Instead, an individual is usually examined in a dyadic relationship and his psychological states are characterized as a function of a single interaction. The difficulty in determining the representativeness of this form in interpersonal interaction can be alleviated through the use of the paradigm posited in this paper. Secondly, this inquiry will give some clue as to where children seek information relating to social and psychological development when the family systems they are imbedded in are providing discrepant message inputs.

SUMMARY

In summary, an attempt has been made to explore the effect divorce has upon interpersonal influence in family communication directed at children. Second, a theoretical paradigm utilizing Woelfel's Forced Aggregate Theory was developed for exploration of the problem area. Finally, a number of practical and theoretical implications were presented. The research that is being proposed here would not only have far-reaching theoretical benefit for the social sciences in general in terms of information theory and network

analysis, but would have practical social significance and applicability to a very severe problem area in society, namely a method by which courts can review their initial custodial decisions at a later point in time to determine if in fact, due to environmental changes in the family system, the original decision should be modified. It would shed light upon the causes of juvenile delinquency for such areas as illegal drug usage and vandalism.

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